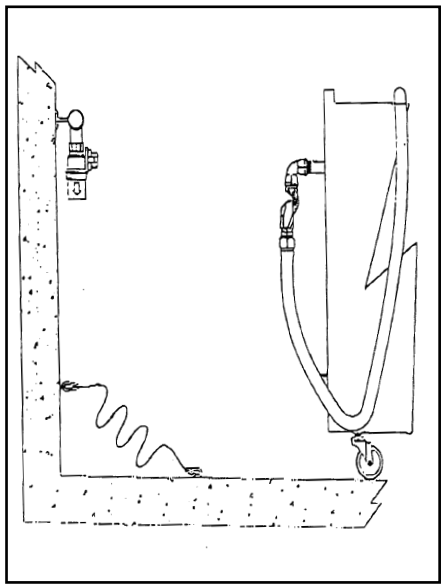
Recommended Operating Instructions: Cleaning Behind Equipment

I. Disconnecting the gas hose:



1. Turn the control knobs of the appliance to the "off" position.
2. Carefully pull the appliance away from the wall, stopping when the restraining device cable is taut.
3. Turn off the gas supply at the local gas isolation valve. Turn off the electrical supply, and unplug any electrical leads.
4. Pull back the sleeve on the female half of the quick-disconnect coupling, and withdraw the nipple which is connected to the gas hose. Do not allow the gas hose to drop onto the floor, which may damage the hose. Protect both halves of the quick-disconnect coupling.
5. Unclip the restraining device at one end.
6. Carefully move the appliance away from the wall.
7. Carry out the cleaning process, making sure no cleaning solution or foreign substance comes into contact with either half of the quick-disconnect coupling or the gas hose.

II. Reconnecting the gas hose:

1. Ensure that the appliance control knobs and the local gas isolation valve are turned off.
2. Reconnect the two halves of the quick-disconnect coupling by pushing the nipple into the female half.
3. Reattach the restraining device.
4. Reconnect any electrical supply cables.
5. Turn the local gas isolation valve to the "on" position.
6. Carefully push the appliance back into position, ensuring that the gas hose is not twisted or kinked.
7. Make sure that the gas hose does not fall under the appliance casters.

Dormont Engineering Support

The Dormont technical department is available to advise on all aspects of gas hose sizing, installation, and Standards. Call 01908 261511.

DORMONT MANUFACTURING COMPANY
6015 Enterprise Drive • Export, PA 15632 USA
(724) 733-4800 • FAX (724) 733-4808
1-800-DORMONT (367-6668)

MECHLINE Developments Ltd.
Unit 18 Potters Lane
Kiln Farm, Milton Keynes • MK11 3HF
Tel: 01908 261511 • Fax: 01908 261522

DM441A, Rev. 6, 05/04

Dormont Flexible Gas Hose Installation and Operating Instructions

To be left with the operator after installation

ISO 9001 REGISTERED
BSI REGISTERED
KM39643

Dormont Flexible Gas Hose Installation and Operating Instructions

WARNING

Please read the following instruction booklet carefully. Failure to fully comply with the enclosed instructions could result in severe injury or death.

WARNING

1. The installation **MUST BE** in compliance with BS 6173-Installation of gas-fired catering appliances for use in all types of catering establishments (1st, 2nd and 3rd family gases).
2. Installation and testing **MUST BE** carried out by a CORGI approved installation engineer.
3. Cleaning solutions and chemicals must not come into contact with any part of the gas hose. This includes acids, solvents, fluxes, chlorinated chemicals etc. In the event of contact with the gas hose, rinse immediately with clean water and dry thoroughly.
4. Contact with sharp objects, wiring etc. and surfaces at temperatures in excess of 105 degrees celsius shall be avoided.
5. Bending and flexing of hoses should be limited to movement required to carefully push and pull appliance into and out of position for cleaning and maintenance.
6. Gas hoses are for use with 1st, 2nd, and 3rd family gas operating at a pressure not in excess of 50mbar.
7. End fittings are bonded into the ends of the gas hose, and no attempt should be made to remove them.
8. Once fitted, gas hoses must not be reused on another appliance or at another location.
9. **WARNING: THE HOSE ASSEMBLY MUST BE FITTED SO THAT GAS ENTERS THE FEMALE HALF OF THE QUICK-DISCONNECT COUPLING AND EXITS THE MALE (NIPPLE) HALF. DIRECTION ARROWS ARE PERMANENTLY MARKED ON THE QUICK-DISCONNECT COUPLING.**
10. Never insert screwdrivers, probes etc. into the quick-disconnect coupling. This will damage the valve assembly.
11. Never allow the gas hose to be kinked, twisted, torqued or pinched when installed.
12. Ensure that only the restraining device supplied with the Dormont hose is fitted. The restraining device must be fitted at all times when the appliance is in use, and should be inspected as part of the regular maintenance and safety procedures.
13. Use only one gas hose per appliance.
14. For installations where greater mobility is required, Dormont SwivelMAX™ gas hose assemblies are recommended.
15. Quick-disconnect coupling must be disconnected prior to maximum movement of appliance to avoid over extending the gas hose. Whenever the appliance is moved for cleaning or maintenance, the instructions contained within this booklet must be followed.

Design Certifications

UK

Certified to BS 669-2:1997
Kitemark License # KM39643

BSI **CORGI** Technical Bulletin 54

USA

Canadian Standards Association

ANSI Z21.24 —	Connectors For Gas Appliances
ANSI Z21.69 —	Connectors For Moveable Gas Appliances.
ANSI Z223.1–	National Fuel Gas Code Fire Prevention Association – N.F.P.A. #54
ANSI Z21.15–	Manually Operated Gas Valve For Appliances, Appliance Connector Valves And Hose End Valves.
ANSI Z21-75 —	Connectors For Outdoor Gas Appliances and Manufactured Homes.
ANSI Z21.90 —	Gas Convenience Outlets and Optional Enclosures.
ANSI Z21.41 —	Quick Disconnect Devices For Use With Gas Fuel.

UL Design certified to ANSI/U.L. 567, Pipe Connectors For Flammable And Combustible Liquids And LP-Gas. For Use With Natural Gas And Propane.

NSF "Component" National Sanitation Foundation Criteria C-2.

City of New York — MEA #376-92-M and 379-92-M.

Approved by the Commonwealth of Massachusetts Board of State Examiners of Plumbers and Gas Fitters.

CANADA

Canadian Standards Association

C.G.A. 6.10 —	Connectors For Gas Appliances.
CSA - 6.16	Connector For Moveable Gas Appliances.
CAN/C.G.A - 6.9	Quick-Disconnect Devices For Use With Gas Fuel.
CAN/C.G.A. B149.1 —	Natural Gas and Propane Installation Code.

BELGIUM

Association Royale Des Gaziers Belges Societe Technique De L'Industrie Du Gaz En Belgique A.S.B.L.
Test Reports LDG/95/2166-2170
December 1995

AUSTRALIA STANDARDS AUSTRALIA

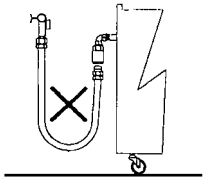
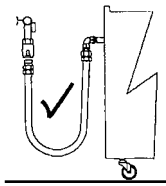
AS 1869-1991
Hose and hose assemblies for liquefied petroleum gases (LPG), natural gas and town gas.

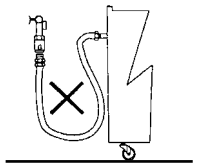
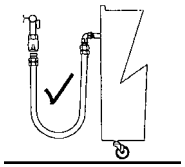
Type 2
AS1869/B-WP7kPa
1650-12.5 mm
1675-19 mm
16100-25 mm
16125-31 mm

ISO 9001 REGISTERED

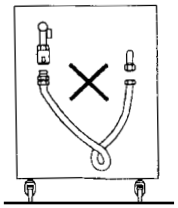
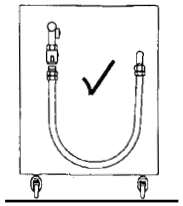
BSI REGISTERED
KM39643

Installation Correct/Incorrect Examples

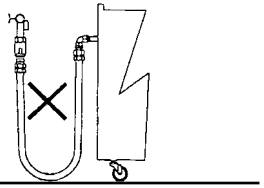
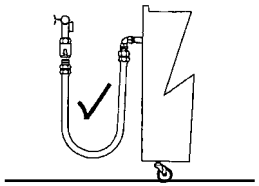
INCORRECT	CORRECT
	
Q.D. AT APPLIANCE END	*Q.D. AT SUPPLY END*

INCORRECT	CORRECT
	

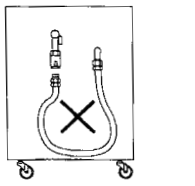
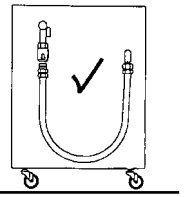
AVOID SHARP BENDS–THE CORRECT WAY TO INSTALL METAL HOSE FOR VERTICAL TRAVERSE IS WITH A SINGLE NATURAL LOOP. AVOID SHARP BENDS THAT STRAIN AND TWIST THE METAL HOSE

INCORRECT	CORRECT
	

AVOID TWISTING THE HOSE

INCORRECT	CORRECT
	

DO NOT ALLOW THE HOSE TO DRAG ON THE FLOOR DURING USE

INCORRECT	CORRECT
	

AVOID FATIGUE, MAINTAIN A CONSTANT LOOP/DIAMETER

Restraining Device Installation Instructions

The restraining device must always be connected when the appliance is in service. **Installation of the restraining device must be in accordance with BS 6173.**

Refer to figure 3.

1. The restraining device must be installed parallel, and in line with the gas hose.
2. Attach the staple bracket (A) securely to the wall using the plastic wall plugs (B), and screws (C) supplied, or an appropriate alternative.
3. Locate a sufficiently strong part of the rear appliance frame. Carefully drill a 5mm diameter hole taking care not to damage internal appliance components.
4. Thread hex nut (D) and washer (E) onto the eye bolt (F). Slide the eye bolt through the 5mm drilled hole and place other washer (E) and nylon lock nut (G) onto the eye bolt on the inside of the appliance panel frame. Tighten securely.
5. Attach one of the restraining device snap hooks (H) to the staple bracket (A) on the wall, and the other to the eye bolt (F).

Note: The restraining devices are designed to be shorter than the length of the gas hose, and can withstand a minimum tensile load of 500kg. The restraining device must be fitted to prevent damage to gas hose assembly, and must not be attached to gas supply pipes, to the gas hose assembly, or to any point which is insufficiently anchored.

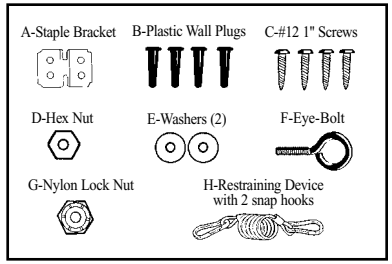
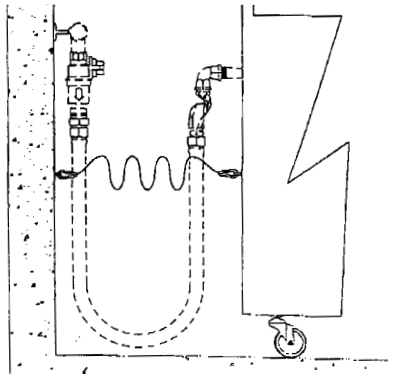


Figure 3



BTU Capacities

Flow rating BTU @ 0.55 sp. gr. natural gas, 0.58 mbar pressure drop, 37.96 MJ/m3

Length (mm)	1000 mm	1250 mm	1500 mm
Hose I.D. inches			
1/2"	66,000	59,000	56,000
3/4"	152,000	142,000	136,000
1"	246,000	236,000	214,000
1 1/4"	490,000	455,000	430,000

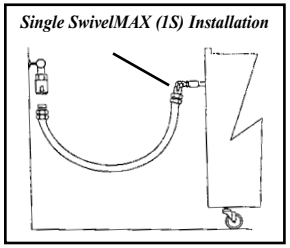
The BTU capacities given here were determined under the test conditions specified in BS669 part 2 1997. The BTU capacities given here are for braided and unbraided gas hoses fitted with standard quick-disconnect fittings or Safety Quik™. For sizes/lengths other than those given, or for hoses fitted with SwivelMAX™ fittings, or without quick-disconnect couplings, contact Mechline for advice.

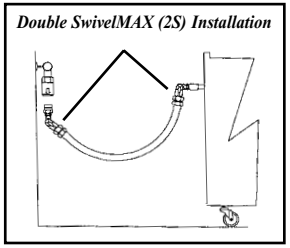
Other Gas Hose Installation Products Available From Dormont

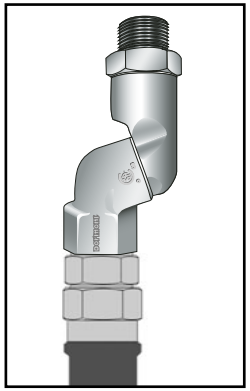
SwivelMAX™ Maximum Movement Swivel

Design-certified for use with Dormont gas hoses only, the SwivelMAX™ is supplied fitted as part of the Dormont gas hose assembly when ordered with an "S" suffix. "2 S" suffix denotes double swivel assembly.

Installation of SwivelMAX™ Dormont gas hose assemblies should be carried out in the same method as detailed in this booklet.







Note: SwivelMAX does not currently fall within the scope of the Kitemark license.

Safety Quik™ Quick-Disconnect Protection Valve

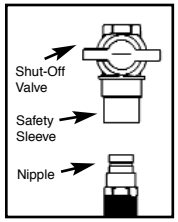
The Safety Quik™ is designed as a combined quick-disconnect coupling/shut off valve, and can be used in place of the female half of the standard quick-disconnect coupling. Installation should be carried out in the same method as detailed in this booklet.

How to use:

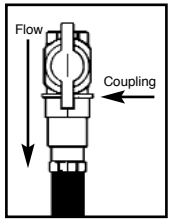
To disconnect

1. Turn the blue isolation handle to the 'off' position - horizontal to the gas hose.
2. Push the outer safety sleeve up toward the blue handle. This will cause the nipple/gas hose assembly to disconnect.

Note: The nipple/gas hose cannot be disconnected until the valve is in the 'off' position.



Off position

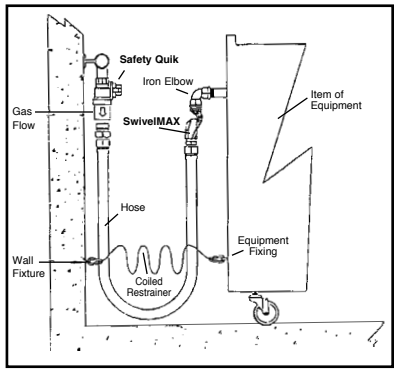


On position

To reconnect:

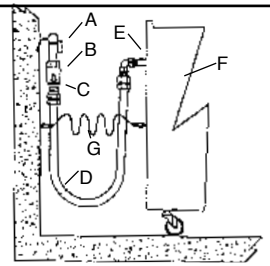
1. Firmly push the quick-disconnect nipple/gas hose assembly into the Safety Quik™ body. This will allow the outer safety sleeve to return to the original position.
2. Turn the blue isolation handle to the 'on' position - in line with gas hose.

Note: The valve cannot be turned to the on position until the nipple/gas hose is fully attached.



Installation Instructions (refer to figure 1. below)

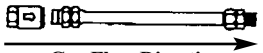
1. Before commencing with the installation, carefully read all sections of this instruction booklet, including the WARNING section and the installation correct/incorrect section. Installation work should only be carried out in accordance with BS 6173 by a CORGI registered engineer.
2. The accessible manually operated shut-off valve shall be installed in accordance with BS 6173: 1990. This gas isolation valve (A) must be in the 'off' position. If there is no local gas isolation valve fitted, the main gas isolation valve must be turned off. Do not commence with installation unless the gas supply is fully isolated.
3. Remove the Dormont gas hose and fittings from the bag/box.
4. The location of the gas connection point on site in relation to the gas connection point on the appliance can vary greatly. It is not possible to illustrate every possible installation combination, and these instructions illustrate a few examples. The installation engineer must take great care to ensure that the gas hose is not kinked, twisted or taut when installed, and that the end fittings of the gas hose are not subjected to sharp bends. The installation shall be such as to avoid excessive flexing, bending or vibration in service. Please refer to section of this manual for correct and incorrect installations. For installation situations where sharp bends are a possibility, or are unavoidable, Dormont SwivelMAX™ fittings are recommended.
5. It is recommended that the connection point for the hose at the installation end is fixed at 600mm – 770mm AFFL and is facing downward. This is dependent upon the length of hose to be used and the gas connection position on the appliance. The gas outlet, to which the hose is to be connected, shall be located in the same room as the appliance. The gas hose assembly must not be concealed within, or run through any wall, floor, or partition. The gas hose must not come into contact with the floor during use.



Side View

Figure 1

A. Local gas isolation valve
B. Female half of quick-disconnect coupling
C. Male (nipple) half of quick-disconnect coupling
D. Dormont gas hose
E. Connection point into appliance
F. Appliance
G. Restraining device


Gas Flow Direction

6. To facilitate moving of the appliance as close to the wall as possible, the two ends of the gas hose should be offset from each other (refer to figure 2).
7. Warning: The quick-disconnect coupling must be fitted so that the gas enters the female half (valved) of the coupling and exits the male (nipple) half. Follow the gas flow direction arrows permanently marked on the coupling.

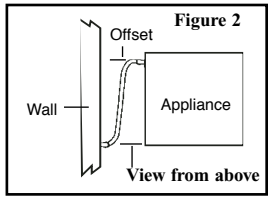


Figure 2
View from above

APPLIANCE SIDE:

8. In order to achieve correct curvature of gas hose, it may be necessary to fit a 90 degree elbow to the appliance connection point (E) fig.1. Apply appropriate thread jointing compound and tighten into position required.
9. End fittings are supplied bonded into the ends of the Dormont gas hose. Apply appropriate thread jointing compound to the end fitting threads, and wind the end fitting/gas hose (D) assembly into the appliance connection point.(E.)
10. Ensure that the gas supply and all the appliance control knobs are turned off before connecting to the gas supply.

GAS SUPPLY (INSTALLATION) SIDE:

11. Separate the female half of the quick-disconnect coupling (B) from the male (nipple) half (C) that is bonded into the end of the gas hose.
12. Apply appropriate thread jointing compound, and thread the female half of the quick-disconnect coupling onto the supply pipe from the gas isolation valve (A.) Tighten into position.
13. Connect the quick-disconnect nipple (C) into the quick-disconnect female (B.)
14. On completion, the final assembly shall be tested for leaks at all joints. Leak test in accordance with accepted procedures. Leak test solutions can cause corrosion, so thoroughly rinsing with water is required. Caution: A naked flame shall not be used for this purpose.
15. When installation of the gas hose is complete, carefully push the appliance back into the required operating position. Check that the hose is not kinked, over bent, caught under the appliance casters, or touching the floor. Ensure that the appliance controls are in the off position before turning on the gas supply.